

REMARKS/ARGUMENTS

On December 15, 2005, the undersigned interviewed with Examiners Dan Sullivan and Tara Garvey to discuss the rejections raised in the Office action of June 28, 2005. The enclosed set of amended claims were presented for discussion during that interview. In particular, claim 39 was amended to to better distinguish the invention from the prior art by specifying that the isolated interferon regulatory factor protein defined therein is an isolated interferon regulatory factor 7A protein. Support for the amendment is found in the specification as originally filed.

The principle rejections raised in the Office action were to claims 5 and 39 for lack of novelty in view of Yoneyama *et al.*, and to claims 4, 5, 17, 18 and 39 on the same grounds in view of Au *et al.* (1998). Having restricted the rejected claims to isolated interferon regulatory factor 7A protein, both examiners believed that the amendments made to the claims would overcome the lack of novelty rejections. However, before any decision can be made as to allowability of the amended claims, the examiners have advised that the claims will have to be further examined for compliance with the nonobviousness criteria for patentability under 35 USC §103. This issue will likely be addressed in the next Office action once Examiner Garvey has had an opportunity to review the application, file history and cited references in more detail.

With respect to prosecution of claims directed to IRF-3, Examiner Sullivan stated that whether Examiner Garvey agrees to rejoin these claims following allowability of the above-noted claims will depend on a review of the file history. If there is sufficient discussion already on record of IRF-3 in view of the prior art, then Examiner Garvey may, as a discretionary matter, rejoin the claims for examination on the merits. As the Applicant is eager to advance prosecution on the merits due to ongoing prosecution of the instant application, rejoining the claims to IRF-3 would be highly favourable and helpful in this respect.

Examiner Sullivan pointed out that the marked-up version of a portion of amended claim 39 was inconsistent with claim 39 on record. Claim 39 has been revised to address this issue by replacing "~~the IRF-7 protein~~" with "~~the IRF protein~~".

Examiner Garvey questioned the meaning of the expression "corresponding wild type IRF-7A protein". Based on the description, it is respectfully submitted that a skilled person would understand this expression to mean an IRF-7A protein that has not been modified in the carboxy-terminus domain (transactivation domain) by modification of serine and/or threonine sites. Modification includes phosphorylation of serine and/or threonine, or by replacement of serine and/or threonine residues with residues having acidic side-chains, preferably carboxylic acid-containing side-chains, such as aspartic acid or glutamic acid residues.

35 USC §102(b) - Claims 5 and 39

The Examiner has reapplied Yoneyama *et al.* alleging that claims 5 and 39 lack novelty. The Examiner argues that the isolated phosphorylated IRF-3 protein disclosed by Yoneyama *et al.* following NDV infection causes an increase in interferon expression and that virus infection inherently results in phosphorylation of IRF-3 in the serine or threonine phosphoacceptor site in the carboxy terminus.

Claim 39 has been amended to specify that the isolated interferon regulatory factor is IRF-7A. Claim 5, which depends on claim 39, has been similarly restricted.

Yoneyama *et al.* do not disclose an IRF-7A protein comprising at least one modified serine or threonine phosphoacceptor site in the carboxy-terminus domain, wherein said modified serine or threonine phosphoacceptor site causes cytokine gene activation by the IRF-7A protein which is increased relative to cytokine gene activation by a corresponding wild type IRF-7A protein.

Applicant respectfully submits that claims 5 and 39, as amended, are novel and patentably distinguishable over Yoneyama *et al.* Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

35 USC §102(a) - Claims 4, 5, 17, 18 and 39

The Examiner has applied *Au et al.* (i.e. Au, W.C., Moore, P.A., LaFleur, D.W., Tombal, B. and Pitha, P.M. (1998) Characterization of the interferon regulatory factor-7 and its potential role in the transcription activation of interferon A gene. *J. Biol. Chem.* 273, 29210-29217) alleging that claims 4, 5, 17, 18 and 39 lack novelty. *Au et al.* disclose that virus infection of an IRF-7H protein facilitates the transfer of IRF-7H to the nucleus causing an increase in interferon expression.

Claim 39 has been amended to specify that the isolated interferon regulatory factor is IRF-7A. This amendment has rendered the subject matter of claim 4 redundant which claim has therefore been canceled. The rejection to claims 5, 17 and 18 has been addressed by virtue of their dependency to amended claim 39, either directly or indirectly.

Au et al. do not disclose an IRF-7A comprising at least one modified serine or threonine phosphoacceptor site in the carboxy-terminus domain, wherein said modified serine or threonine phosphoacceptor site causes cytokine gene activation by the IRF-7A protein which is increased relative to cytokine gene activation by a corresponding wild type IRF-7A protein.

Accordingly, Applicant respectfully submits that claims 5, 17, 18 and 39, as amended, are novel and patentably distinguishable over *Yoncyama et al.* and in this respect, requests that the rejection be withdrawn.

In view of the forgoing, early favorable consideration of this application is earnestly solicited.

It is believed this responds to all of the Examiner's concerns, however if the Examiner has any further questions, he is invited to contact Elizabeth Hayes-Quebec at (613) 232-2486.

Respectfully submitted,

Date: December 16, 2005

By: Elizabeth A. Hayes-Quebec
Elizabeth A. Hayes-Quebec
Registration No. 48,305

Correspondence Address:

Baker Botts L.L.P.
30 Rockefeller Plaza
44th Floor
New York, New York, 10112-4498
U.S.A.

(212) 408-2500